IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLIZANT:

Steven W. Meeks and Rusmin Kudinar

APPLICATION NO.:

10/660,984

FILING DATE:

September 12, 2003

TITLE:

System and Method For Simultaneously Measuring Thin Film

Layer Thickness, Reflectivity, Roughness, Surface Profile &

Magnetic Pattern On Thin Film Magnetic Disks & Silicon Wafers

EXAMINER:

T. Nguyen

GROUP ART UNIT:

2877

ATTY. DKT. NO.:

20830-08288

CERTIFICATE OF MAILING

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Dated:

11 Aug 2004

By:

John McNelis, Reg. No. 38,186

COMMISSIONER FOR PATENTS

P.O. BOX 1450

ALEXANDRIA, VA 22313-1450

TRANSMITTAL LETTER IN SUPPORT OF INFORMATION DISCLOSURE STATEMENT Under 37 CFR §§ 1.56 and 1.97-98

SIR:

In response to the Office Action dated April 7, 2004, Applicant resubmits the Transmittal Form, Information Disclosure Statement, PTO/SB/08A and postcard filed by Applicants on October 23, 2003, together with the non-patent references previously omitted.

Applicants request that the Examiner consider the references cited in this Information Disclosure Statement.

Should there be a fee required for consideration of the listed references, please charge deposit account 19-2555.

Respectfully submitted,

STEVEN W. MEEKS & RUSMIN KUDINAR

Dated:

11 day 2004

John McNalia Dog No. 2

John McNelis, Reg. No.: 37,186

Fenwick & West LLP Silicon Valley Center 801 California Street

Mountain View, CA 94041

Tel.: (650) 335-7133 Fax.: (650) 938-5200



Date Mailed:	Atty/Sec: NSH/klm Filing Date: September 12, 2003
Application No.: 10/660/984	Docket No.: 20830-08288
Applicant(s): Steven W. Meeks & Ru	smin Kudinar
Title: System and Method for Simult	aneously Measuring Thin Film Layer Thickness
Please imprint Patent Office "date s pages of Specification, Claims Abstract sheets of formal drawings	amp" hereon to indicate receipt and return card to addressee
☐ Provisional Application Cover She	are the state of the coning to the
	Request for Corrected Filing Receipt
☐ Transmittal ☐ Fee Transmittal (in duplicate)	Request for Correction of Recorded Assignment
☐ Declaration ·	IDS, PTO/SB/08A
☐ Assignment & Recordation Cover	Sheet Issue Fee Transmittal
Power of Attorney	Letter to Chief Draftsperson
RCE Transmittal	Formal Drawings: sheets
Application Data Sheet	Request for Certificate of Correction
Check in the amount of \$:	Notice of Appeal
☐ Amendment/Response \(\vec{\vec{x}} \)	Express Mail No.
Other	*/

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Rev. 10/95 U.S. Department of Patent and Trade		Application Number	10/660,98	4		
		Filing Date	Septemb	er 12, 2003		
TRANSMITTAL FOR		First Named Inventor	Steven W	. Meeks		
(to be used for all correspondence during parties of the filed application)	enaency of	Group Art Unit Number	2877			
		Examiner Name .	T. Nguyei	1		
Total Number of Pages in This Submission	8	Attomey Docket Number	20830-082	288		
ENCL	OSURES	(check all that apply	·)			
Fee Transmittal Form (in duplicate)		Issue Fee Transr		· · · · · · · · · · · · · · · · · · ·		
Check Enclosed	•					
Return Receipt Postcard		Letter to Chief Dr				
		Formal Drawing(s	•			
Response to Notice to File Missing Par) of Figure(s)			
Assignment & Recordation Cover Shee	t	Appeal Communi	cation to Boar	d of Appeals and		
Declaration		Interferences				
Power of Attorney		Appeal Communication to Group				
Application Data Sheet		(Appeal Notice, Brief, Reply Brief)				
Information Disclosure Statement & PT	O/SB/08A	Certified Copy of Priority Document(s)				
Copies of IDS Cited Reference	æs	After Allowance Communication to Group				
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SIGNAT	TURE OF A	ATTORNEY OR AGEN	T			
Signature: Mth. S.	4	<u> </u>				
Attorney/Reg. No.: Nathan Huynh/Reg. N	o. 53,052	-	Dated:	October 23, 2003		
	EDTIFICA	TE OF MAILING				
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Signature:	S. 11	20				
Typed or Printed Name: Nathan Huynh	, v		Dated:	October 23, 2003		
Express Mail Mailing Number (optional):						

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

PLICANT:

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Dated: October 23, 2003

Nathan Huynh, Reg. No.: 53,052

COMMISSIONER FOR PATENTS P.O. BOX 1450

ALEXANDRIA, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT Under 37 CFR §§ 1.56 and 1.97-98

SIR:

Pursuant to the provisions of 37 CFR §§ 1.56 and 1.97-98, enclosed herewith is modified form PTO/SB/08A listing references for consideration by the Examiner. Enclosed is a copy of each listed reference that may be material to the examination of this application, and for which there may be a duty to disclose.

The filing of this Information Disclosure Statement shall not be construed as a representation regarding the completeness of the list of references, or that inclusion of a reference in this list is an admission that it is prior art or is pertinent to this application, or that a search has been made, or as an admission that the information listed is, or may be considered to be, material to patentability, or that no other material information exists, and shall not be construed as an admission against interest in any manner.

This Information Disclosure Statement is being filed:

within three months of the filing date of the application, or date of entry into the national stage of an international application, or before the mailing date of a first office action on the merits, whichever event last occurred;

ш	OCIOIO L	iio iiiu	and of a first official action after the filling of a request for
	continue	ed exa	mination (RCE) under 37 CFR § 1.114;
	after thr	ee mo	nths of the filing date of this national application or the date
			national stage in an international application, or after the
			f the first official action on the merits, whichever event last
			before the mailing date of the first to occur of either: (1) a
			der 37 CFR §1.113; or (2) an action that otherwise closes
			the application, and:
	□ .	attach	ed hereto is the fee set forth under 37 CFR §1.17(p) for
			ssion of this Information Disclosure Statement under 37
			§ 1.97(c); OR
		Appli	cant certifies pursuant to 37 CFR § 1.97(e) that:
		□	each item of information contained in this Information
			Disclosure Statement was first cited in a communication
		(#	from a foreign patent office in a counterpart foreign
			application not more than three months prior to the filing of
			this Statement; OR
			no item of information contained in this Information
		-	Disclosure Statement was cited in a communication from a
			foreign patent office in a counterpart foreign application
			and, to the knowledge of the person signing this
			certification after making reasonable inquiry, no item of
			information contained in this Statement was known to any
			individual designated under 37 CFR § 1.56(c) more than
			three months prior to the filing of this Statement;
			he payment of the issue fee but after the mailing date of the
	first to d	occur (of either: (1) a final action under 37 CFR § 1.113; (2) a
			wance under 37 CFR § 1.311; or (3) an action that otherwise
•			ation in the application, and:
		Applic —	cant certifies pursuant to 37 CFR. § 1.97(e) that:
	ļ		each item of information contained in this Information
			Disclosure Statement was cited in a communication from a
			foreign patent office in a counterpart foreign application not
			more than three months prior to the filing of this Statement;
		_	or
	l		no item of information contained in this Information
			Disclosure Statement was cited in a communication from a

		foreign patent office in a counterpart foreign application
•		and, to the knowledge of the person signing this
		certification after making reasonable inquiry, no item of
		information contained in this Statement was known to any
		individual designated under 37 CFR § 1.56(c) more than
		three months prior to the filing of this Statement; AND
		attached hereto is the fee set forth under 37 CFR §1.17(p) for
	٠	submission of this Information Disclosure Statement under 37
	-	CFR.§ 1.97(c); OR
		after the payment of the issue fee. Applicant requests that the information
		contained in this Information Disclosure Statement be placed in the file
		according to 37 CFR § 1.97(i), although the information may not be
		considered by the USPTO.
		This application relies, under 35 U.S.C. § 120, on the earlier filing date of prior
		application No. APPLICATION NO., filed on DATE FILED, and the references
		cited therein are hereby referenced, but are not required to be provided in this
		application under 37 CFR § 1.98(d).
		Each item of information contained in this Information Disclosure Statement was
	_	cited in a communication from a foreign patent office in a counterpart application,
		and the communication was not received by any individual designated in 37 CFR
		§ 1.56(c) more than thirty days prior to the filing of this Information Disclosure
		Statement. 37 CFR § 1.704(d).
		Applicant submits that no fee is required for the consideration of this Information
	_	Disclosure Statement.
	Consid	deration of the listed references and favorable action are solicited.
		and the solution and the solution are solution.
		Respectfully submitted,
		STEVEN W. MEEKS & RUSMIN KUDINAR
Dated:	Octob	er 23, 2003 By: Mull S. C.
		Nathan Huynh, Reg. No.: 53,052
		Fenwick & West LLP Silicon Valley Center
		801 California Street
		Mountain View, CA 94041
		Tel.: (650) 335-7211
		Fax.: (650) 938-5200

he Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

AUG 1 6 2004

Sheet

ORMATION DISCLOSURE STATEMENT BY APPLICANT

4

-		Complete if Known	
	Application No.	10/660,984	
	Filing Date	September 12, 2003	
	First Named Inventor	Steven W. Meeks	
	Art Unit	2877	
	Examiner Name	T. Nguyen	
	Attorney Docket Number	20830-08288	- · ·

			U.S. PATE	NT DOCUMENTS
		Document No.		
Examiner Initials*	Cite No.1	Number – Kind Code ² (if known)	Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document
	A1	3,885,875	05/27/1975	Rosenfeld et al.
	A2	4,332,477	06/01/1982	Sato
	A3	4,585,348	04/29/1986	Chastang et al.
	A4	4,668,860	05/26/1987	Anthon
	A5	4,870,631	09/26/1989	Stoddard
	A6	4,873,430	10/10/1989	Juliana et al.
	A7	5,017,012	05/21/1991	Merritt, Jr. et al.
	A8	5,129,724	07/14/1992	Brophy et al.
	A9	5,189,481	02/23/1993	Jann et al.
	A10	5,196,906	03/23/1993	Stover et al.
	A11	5,270,794	12/14/1993	Tsuji et al.
	A12	5,293,216	03/08/1994	Moslehi
	A13	5,313,542	05/17/1994	Castonguay
	A14	5,406,082	04/11/1995	Pearson et al.
	A15	5,416,594	05/16/1995	Gross et al.
	A16	5,446,549	08/29/1995	Mazumder et al.
	A17	5,463,897	11/07/1995	Prater et al.
	A18	5,608,527	03/04/1997	Valliant et al.
	A19	5,610,897	03/11/1997	Yamamoto et al.
	A20	5,633,747	05/27/1997	Nikoonahad
	A21	5,644,562	07/01/1997	de Groot
	A22	5,694,214	12/02/1997	Watanabe et al.
	A23	5,726,455	03/10/1998	Vurens
	A24	5,748,305	05/05/1998	Shimono et al.
	A25	5,777,740	07/07/1998	Lacey et al.
	A26	5,798,829	08/25/1998	Vaez-Iravani
	A27	5,864,394	01/26/1999	Jordan, III et al.
	A28	5,875,029	02/23/1999	Jann et al.
	A29	5,880,838	03/09/1999	Marx et al.
	A30	5,903,342	05/11/1999	Yatsugake et al.

	xaminer Signature	Date Considered	
L			

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609.

Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Applicant's unique citation designation number (optional). ²See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶Applicant is to place a check mark here if English language Translation is attached.

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	Substitute for	form 1449A/F	то		Complete if Known
INFO	RMATIO	N DISC	LOSURE	Application No.	10/660,984
			PLICANT	Filing Date	September 12, 2003
OIA		DI AFI	LICANI	First Named Inventor	Steven W. Meeks
				Art Unit	2877
				Examiner Name	T. Nguyen
Sheet	2	of	4	Attorney Docket Number	20830-08288

			U.S. PATE	ENT DOCUMENTS
		Document No.		
Examiner Initials*	Cite No.1	Number – Kind Code ² (if known)	Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document
	A31	5,951,891	09/14/1999	Barenboim et al.
	A32	5,978,091	11/02/1999	Jann et al.
	A33	5,985,680	11/16/1999	Singhal et al.
	A34	5,986,761	11/16/1999	Crawforth et al.
<u> </u>	A35	5,986,763	11/16/1999	Inoue
	A36	5,995,226	11/30/1999	Abe et al.
	A37	6,081,325	06/27/2000	Leslie et al.
	A38	6,088,092	07/11/2000	Chen et al.
	A39	6,091,493	07/18/2000	Stover et al.
	A40	6,107,637	08/22/2000	Watanabe et al.
	A41	6,118,525	09/12/2000	Fossey et al.
	A42	6,134,011	10/17/2000	Klein et al.
	A43	6,157,444	12/05/2000	Tomita et al.
	A44	6,169,601	01/2001	Eremin et al.
	A45	6,172,752	01/09/2001	Haruna et al.
	A46	6,201,601B1	03/13/2001	Vaez-Iravani et al.
·	A47	6,248,988	06/19/2001	Krantz
	A48	6,271,916B1	08/07/2001	Marxer et al.
	A49	6,307,627	10/23/2001	Vurens
	A50	6,353,222B1	03/05/2002	Dotan
	A51	.6,384,910B2	05/07/2002	Vaez-Iravani et al.
	A52	6,509,966B2	01/21/2003	Ishiguro et al.
	A53	6,542,248B1	04/01/2003	Schwarz
	A54	6,603,542	08/2003	Chase et al.

Examiner Signature	Date Considered	
L		

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609.

Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Applicant's unique citation designation number (optional). ²See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶Applicant is to place a check mark here if English language Translation is attached.

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	Substitute for t	form 1449A	PTO		Complete if Known	
INFC	DRMATION	ו חופר	I OSLIDE	Application No.	10/660,984	
	TEMENT I			Filing Date	September 12, 2003	
JIA	I CIVICIA I	DI AF	PLICANI	First Named Inventor	Steven W. Meeks	
				Art Unit	2877	
				Examiner Name	T. Nguyen	
Sheet	3	of	4	Attorney Docket Number	20830-08288	

			U.S. PATE	ENT DOCUMENTS	
		Document No.			······································
Examiner Initials*	Cite No. ¹	Number – Kind Code ² (if known)	Name of Patentee or Applicant of Cited Document	· · · · · · · · · · · · · · · · · · ·	
		:	FOREIGN PA	TENT DOCUMENTS	
		Foreign Patent Document	•		
Examiner Initials*	Cite No.1	Country Code ³ – Number ⁴ Kind Code ⁵ (if known)	Publication Date MM-DD- YYYY	Name of Patentee or Applicant of Cited Document	Te
	B1	WO 98/52019	11/19/1998	Technische Universiteit Delft	
	B2	JP 3-221804	09/30/1991	NEC Corp	

	<u> </u>		· ·
Examiner Signature	·	Date Considered	

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U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO			Complete if Known		
INFORMATION DISCLOSURE STATEMENT BY APPLICANT			CI OSLIDE	Application No.	10/660,984
				Filing Date	September 12, 2003
STATEMENT BY APPLICANT		First Named Inventor	Steven W. Meeks		
				Art Unit	2877
•		Examiner Name	T. Nguyen		
Sheet	4	of	4	Attorney Docket Number	20830-08288

		OTHER REFERENCES - NON-PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T ⁶
	C1	W.C. Leung, W. Crooks, H. Rosen and T. Strand, An Optical Method Using a Laser and an Integrating Sphere Combination for Characterizing the Thickness Profile of Magnetic Media, Sept. 1989, IEEE Transaction on Magnetics, Vol. 25, No. 5. Pages 3659-3661.	
·	C2	Steven W. Meeks, Walter E. Weresin, and Hal J. Rosen, <i>Optical Surface Analysis of the Head-Disk-Interface of Thin Film Disks</i> , January 1995, Transactions of the ASME, Journal of Tribology, Vol. 117, pages 112-118.	
	C3	Steven Meeks, Maxtor and Rusmin Kudinar, <i>The Next Battleground: Head-Disk Interface,</i> March 1998, Data Storage, Test & Measurement, pages 29-30, 34 and 38.	
	C4	Laser Scanning Surface Profilometer, [online], August 1970, [retrieved January 29, 2001], Pages 789-790, Retrieved from the Internet: <url: http:="" tdb?&order="7OC101758.</td" tdbs="" www.delphion.com=""><td>٠.</td></url:>	٠.
	C5	Meeks, Steven W.: "A Combined Ellipsometer, Reflectometer, Scatterometer and Kerr Effect Microscope for Thin Film Disk Characterization," Machine Vision Applications in Industrial Inspection VIII, Proceedings of SPIE, vol. 3966, 2000, pages 385-391, XP001085220.	

	<u> </u>		·
Examiner Signature		Date Considered	

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Date Mailed:	Atty/Sec: NSH/klm Filing Date: September 12, 2003
Application No.: 10/660/984	Docket No : 20830-08288
Applicant(s): Steven W. Meeks & Ru	usmin Kudinar
Title: System and Method for Simul	taneously Measuring Thin Film Layer Thickness
Please imprint Patent Office "date some pages of Specification, Claim Abstract sheets of formal drawings Provisional Application Cover Show Utility Application Transmittatory Transmittatory Pee Transmittatory Pee Transmittatory Power of Attorney RCE Transmittatory RCE Transmittatory Application Data Sheet Check in the amount of \$ Amendment/Response	stamp" hereon to indicate receipt and return card to addressee. S & Nonpublication Request under 35 U.S.C. 122(b)(2)(B)(i). Peet Response to Notice Of Missing Parts Request for Corrected Filing Receipt Request for Correction of Recorded Assignment IDS, PTO/SB/08A
Other	·